OLR RESEARCH REPORT

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ANAEROBIC DIGESTERS AND RENEWABLE ENERGY CREDITS

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You asked (1) whether anaerobic digesters qualify for renewable energy credits (RECs) under the state's renewable portfolio standard and (2) whether there is floor on the price of these RECs.

SUMMARY

Anaerobic digesters convert manure or other organic products into methane, the principal component of natural gas. The methane can be used for heating or electricity generation, among other things.

The electricity produced from anaerobic digesters qualifies for RECs under the state's renewable portfolio standard. There is no floor on the price of RECs, but rather a ceiling.

Legislation adopted last session (PA 11-80) creates a program to provide financial incentives for anaerobic digesters.

RENEWABLE PORTFOLIO STANDARD

The state's renewable portfolio standard requires electric companies and competitive electric suppliers to get part of their power from three classes of renewable resources. In the case of electric companies, this obligation is transferred to their wholesalers. In practice, the standard is met by buying RECs on the regional wholesale electric market.

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Renewable generators obtain RECs for the amount of power they generate from renewable resources. The generator must either be located in New England or transmit its power to the region.

ANAEROBIC DIGESTERS AND RECs

Under CGS § 16-1, class I renewable energy resources include the energy derived from methane gas from landfills. In 2008, the Department of Public Utility Control (DPUC, now the Public Utilities Regulatory Authority) issued a declaratory ruling that the energy produced from methane created from manure and organic waste that is placed into an anaerobic digester and decomposed under anaerobic conditions (i.e., in the absence of oxygen) qualifies as a class I resource (docket 07-06-22). Similarly, in 2008 DPUC ruled that a generation facility that uses anaerobic digesters to generate methane from waste food products qualified as a class I resource (docket 08-09-04). This facility would use food waste from restaurants, institutional cafeterias, supermarkets, food processors and potentially other sources.

There is a ceiling but not a floor on the price of class I RECs. CGS §§ 16-244c and 16-245 set the cap at 5.5 cents per kilowatt-hour for the price of these RECs. The actual market price of class I RECs in Connecticut in 2011 was about 2.5 cents per kilowatt-hour, according La Capra Associates, a consulting firm.

RELATED LEGISLATION

PA 11-80 establishes a program to promote anaerobic digesters. It requires the Clean Energy Finance and Investment Authority to establish a pilot program to support "sustainable practices and economic prosperity" of Connecticut farms by using organic waste with on-site anaerobic digestion facilities to generate electricity and heat. The assistance can take the form of loans, grants, or power purchase agreements. The authority may approve no more than five projects under the program, each with a maximum size of 1,500 kilowatts (1. 5 megawatts) and a maximum cost of $450 per kilowatt. The authority must allocate $2 million annually for the digester program. By January 1, 2016, the authority must report to the Energy and Technology Committee on the program and whether it should continue.

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